UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,645	05/01/2001	Tom Milner	10004560-1	4840

7590   04/06/2005

HEWLETT-PACKARD COMPANY
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EXAMINER
SCHNEIDER, JOSHUA D

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
<tr>
<td rowspan="3">Office Action Summary</td>
<td colspan="2">Application No.</td>
<td colspan="2">Applicant(s)</td>
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<tr>
<td colspan="2">09/846,645</td>
<td colspan="2">MILNER ET AL.</td>
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<td>Examiner</td>
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<td>Joshua D Schneider</td>
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _20 January 2005_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _14-36_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _14-36_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 1/20/2005 has been entered.

Response to Arguments

2.   Applicant's arguments with respect to claims 14 and 18 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

4.   Claims 21-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the enablement requirement. The claim(s) contains subject matter which was not described in

the specification in such a way as to enable one skilled in the art to which it pertains, or with

which it is most nearly connected, to make and/or use the invention.

5.   With regards to claims 21, 26, and 31, it is not found anywhere in the specification where

the code retrieved from the device for identifying the type of device is executable code. The

specification describes the property files (pages 8-11) that identify the devices only as data files

and never makes reference to them containing executable code portions.

6.   With regards to claims 22 and 30, the specification never refers to a SysObjID.

Applicant claims using a system object identifier in claim 30. This is defined by the reference

applied in earlier rejections but not in the Applicants specification. It would also appear that the

applicant is using conflicting limitations.

7.   Claims 23-25, 27-30, and 32-36 are rejected for including the non-enabled subject matter

of the claims from which they depend. *for claims 21-36* Qett 04/4/05

8.   No art rejections are made because the specification does not provide adequate

description of the invention to enable the examiner to interpret the claims based on specification

in light of the 35 USC 112 rejections without requiring the examiner to make a great deal of

speculative assumptions. See MPEP 2173.06 wherein it is stated:

> "... where there is a great deal of confusion and uncertainty as to the proper interpretation of the limitations of a
> claim, it would not be proper to reject such a claim on the basis of prior art. As stated in In re Steele , 305 F.2d
> 859, 134 USPQ 292 (CCPA 1962), a rejection under 35 U.S.C. 103 should not be based on considerable
> speculation about the meaning of terms employed in a claim or assumptions that must be made as to the scope of
> the claims."

9.   All further rejections and objections are made in view of the specification as best -> Qett

understood in light of the previous objections and rejections.   4/4/05

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

11.   Claims 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent 6,122,639 to Babu et al.

12.   With regards to claim 14, Babu teaches retrieving a plurality of property files from a

predefined subdirectory; wherein each property file of said plurality of property files describes a

type of device (Fig. 3, elements 302-314, column 2, line 64, through column 3, line 10, and

column 3, lines 45-47). Babu teaches determining whether a device associated with said I/O

path is the type of device described by the property file associated with said object method

(column 2, line 64, through column 3, line 10). Babu teaches a plurality of methods may be used

to identify the device, such as new device identification (Fig. 3) or device update detection (Fig.

4A). Removing a class identifier from each property file of said property files, wherein each

class identifier identifies a class; creating object of the respective class of each class identifier;

and calling a specific method from a plurality of methods for each created object would have

been obvious to one of ordinary skill in the art at the time of invention, as object oriented

programming was well known in the art in order to increase portability and competitiveness in

the computer marketplace though the use of leading edge technology.

13.   With regards to claim 15, Babu teaches adding a new storage device to said storage area

network (column 1, lines 44-55), wherein said new storage device is caused to be associated with

said I/O path, and wherein said new storage device is a new type of device to said storage area

network, and storing a new property file in said predefined subdirectory describing said new type

of device (column 2, line 64, through column 3, lines 67). The restarting code of a management

server to thereby cause repetition of steps utilizing said new property file, is inherent to the

continued running of the process to track and update device information (column 4, lines 51-64).

14.   With regards to claim 17, Babu teaches a default property file of said plurality of property

files identifies a simple network management protocol (SNMP) class, wherein said default

SNMP class defines a method to identify devices by a comparing a SNMP system object

identifier to at least one field in said default property file (Fig. 5, column 8, lines 7-24, and

column 2, line 65, through column 3, line 54).

15. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent

6,122,639 to Babu et al. in further view of U.S. Patent Application Publication No. US

2002/0161852 to Allen et al.

16. With regards to claim 16, Babu fails to explicitly teach the use of SCSI identifiers. Allen

teaches that SCSI devices are well known in the art, and a default property file of said plurality

of property files identifies a default small computer system interface (SCSI) class, wherein said

default SCSI class defines a method to identify devices by comparing SCSI vendor identifier and

product identifier information to at least one field in said default property file (page 4, paragraph

30). It would have been obvious to one of ordinary skill in the art at the time of invention to

combine the SCSI identifiers of Allen with the Device defining of Babu in order to accommodate

new device types according to an agreed upon protocol.

17. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent

6,122,639 to Babu et al. in further view of U.S. Patent Application Publication No. US

2002/0161852 to Allen et al.

18. With regards to claim 18, the AAPA teaches a storage area network (SAN) comprising: a

plurality of servers, wherein said servers are communicatively coupled to a fabric of said SAN

(page 2, lines 12-24); Babu teaches host agent processes, wherein each of said host agent

processes executes on a respective server of said plurality of servers, and wherein said host agent

processes are operable to query devices associated with host logical unit numbers I/O paths of

said SAN to gather device information (column 2, line 65, through column 3, line 54), a

management server, wherein said management server employs a simple network management

protocol (SNMP) manager process to query devices associated with SNMP I/O paths of said

SAN to gather device information (column 3, lines 46-54), a plurality of property files stored in a

predefined directory, wherein each property file of said plurality of property files describes a

type of device, and wherein each property file of said plurality of property files includes an

identifier of code operable to determine whether a device associated with an I/O path is the type

of device described by its associated property file (column 2, line 65, through column 3, line 10),

and, a management server process, wherein said management server process is operable to

receive gathered device information from said plurality of host agent processes and from said

SNMP manager process; and wherein said management server process is operable to call code

identified by property files with gathered device information as arguments to thereby identify

types of devices associated with I/O paths of said SAN (column 3, lines 46-67). Babu teaches

uniquely identifying each device (column 14, line 62, through column 15, line 6). It would have

been obvious to one of ordinary skill in the art at the time of invention to combine the plurality

of servers of the AAPA with the device detection of Babu et al. in order for a network to be able

to easily accommodate new device types in a network in which a change has occurred

19.   Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent 6,122,639 to Babu et al. and the applicant admitted prior art (AAPA) in further view of

U.S. Patent Application Publication No. US 2002/0161852 to Allen et al.

20.   With regards to claim 19, Babu teaches creating an array of identifiers including each

said identifier from each property file (Fig. 5, column 8, lines 7-24, and column 2, line 65,

through column 3, line 54). Allen teaches a plurality of small computer system interface (SCSI) device discovery objects utilizing identifiers from said array that identify SCSI device classes (page 4, paragraph 30), and Babu teaches a plurality of SNMP device discovery objects utilizing identifiers from said array that identify SNMP device classes. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the SCSI identifiers of Allen with the Device defining of Babu in order to accommodate new device types according to an agreed upon protocol. Code instantiating objects from an array of identifiers would have been obvious to one of ordinary skill in the art at the time of invention, as object oriented programming was well known in the art.

21.   With regards to claim 20, Babu fails to explicitly teach the use of SCSI identifiers. Allen teaches SCSI device discovery object for each host logical unit numbers I/O path (page 4, paragraph 30); and Babu teaches SNMP device discovery object for each SNMP I/O path (column 3, lines 46-50). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the SCSI identifiers of Allen with the Device defining of Babu in order to accommodate new device types according to an agreed upon protocol. Code calling a method of each instantiated object would have been obvious to one of ordinary skill in the art at the time of invention, as object oriented programming was well known in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey A Gaffin can be reached on (571) 272-4146. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDS

KIM HUYNH
PRIMARY EXAMINER
4/4/05